

## INTERNATIONAL SEARCH REPORT

International Application No. **QV6053**  
PCT/DE2004/000004

| <b>A. CLASSIFICATION OF SUBJECT MATTER</b><br>IPC 7 F16L37/00 F16L37/14  |  |  |
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| According to International Patent Classification (IPC) or to both national classification and IPC  |  |  |
| <b>B. FIELDS SEARCHED</b><br>Minimum documentation searched (classification system followed by classification symbols)<br>IPC 7 F16L   |  |  |
| Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  |  |  |
| Electronic data base consulted during the international search (name of data base and, where practical, search terms used)<br>EPO-Internal   |  |  |
| <b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>  |  |  |
| Category*  | Character of document, with indication, where appropriate, of the relevant passages                          | Relevant to claim No.  |
| Y  | DE 33 24 383 A (BEVIPI AG)<br>12 January 1984 (1984-01-12)<br>cited in the application<br>the whole document | 1  |
| Y  | FR 1 468 174 A (GRA TEC INC)<br>3 February 1967 (1967-02-03)<br>page 3 -page 4                               | 1  |
| Y  | US 6 290 263 B1 (MURKEN JOSEPH S)<br>18 September 2001 (2001-09-18)<br>abstract; figure 1                    | 1  |
| Y  | GB 902 447 A (HATHAWAY LTD L)<br>1 August 1962 (1962-08-01)<br>the whole document                            | 1  |
| <input type="checkbox"/> Further documents are listed in the continuation of box C. <input checked="" type="checkbox"/> Patent family members are listed in an annex.  |  |  |
| * Special categories of cited documents:<br>"A" document defining the general state of the art which is not considered to be of particular relevance<br>"E" earlier document but published on or after the international filing date<br>"L" document which may throw doubt on priority claims or which is cited to establish the publication date of another claim or other special reason (as specified)<br>"O" document referring to an oral disclosure, use, exhibition or other means<br>"P" document published prior to the international filing date but later than the priority date claimed<br>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principles or theory underlying the invention<br>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone<br>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art<br>"A" document member of the same patent family |  |  |
| Date of the actual completion of the international search<br><br>5 May 2004  |  | Date of mailing of the international search report<br><br>02/06/2004 |
| Name and mailing address of the ISA<br>European Patent Office, P.O. 5010 Patentstr. 2<br>NL - 2280 HV Rijswijk<br>Tel. (+31-70) 340-2040, Tx. 51 051 epo nl,<br>Fax (+31-70) 340-3016  |  | Authorized officer<br><br>Eberwein, M                                |

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Information on patent family members

International Application No. QV6053  
PCT/DE2004/000004

| Patent document<br>cited in search report |    | Publication<br>date | Patent family<br>member(s)                   | Publication<br>date                    |
|---|----|---------------------|--|--|
| DE 3324383                                | A  | 12-01-1984          | IT 1156050 B<br>DE 3324383 A1<br>DK 274183 A | 28-01-1987<br>12-01-1984<br>10-01-1984 |
| FR 1468174                                | A  | 03-02-1967          | NONE   |  |
| US 6290263                                | B1 | 18-09-2001          | NONE   |  |
| GB 902447                                 | A  | 01-08-1962          | NONE   |  |

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